

Benefit Planning Management for ITSM: Evaluating Benefit Realization Frameworks

Stuart Mcloughlin, Helana Scheepers, Ravinda Wijesinghe
Department of Information Systems and Logistics
Swinburne University of Technology
Hawthorne, Victoria

Email: smcloughlin@swin.edu.au, hscheepers@swin.edu.au, rwijesinghe@swin.edu.au

Abstract

The popularity of ITSM frameworks such as ITIL is indicative of the perception amongst practitioners that there are key benefits to be derived, at both the organizational level and the functional level. Various studies indicate that a comprehensive benefits realization model is required to ensure that organizations maximize benefits of ITSM projects. Although there is a call for more research in this area, very few ITSM related studies explore such benefits realization models with any level of detail. This paper is a conceptual study that reviews the literature on benefits realization models and applies and adapts prior learning from the Enterprise System, Enterprise Resource Planning literature and the general Information Systems literature on Benefit Realization Management to inform the research and practice in the ITSM field. We posit that, based on the unique characteristics of ITSM that the most likely benefits realization model that should be explored in an ITSM context is the Cranfield Process Model of Benefits Management.

Keywords

Information Technology Service Management, Benefits Realization Frameworks, Benefit Planning Management: Evaluating benefit realization frameworks.

INTRODUCTION

Information Technology Service Management (ITSM) may be broadly defined as a strategy by which the information systems of an organization are provided as a service to the business (the customer) and performance is managed by contract (Service Level Agreement) (Pollard et al. 2009). The focus of ITSM is on service support and service delivery so as to continually optimize IT services, both on a tactical and on a strategic level (Iden and Langeland 2010). ITSM sees the relationship between the IT organization and the business as having shifted from a technologically driven focus to a service delivered to a customer or business driven focus. ITSM is perceived to improve the organizational performance of the organization and is seen to facilitate the satisfaction of business requirements (a greater customer orientation, efficiency and effectiveness), and a better alignment of IT with organizational objectives (Iden and Eikebrokk 2013) through the more effective management and control of IT services.

The popularity of ITSM frameworks such as ITIL is indicative of the perception amongst practitioners that there are key benefits to be derived, at both the organizational level and the functional level (Marrone et al. 2010). Marrone et al. (2011) identify these dual benefits as operational effectiveness and strategic level positioning. Service orientated IT management seeks to proactively support the business needs and in doing so enhance the alignment between IT and the business. Enhanced business-IT alignment improves organizational performance and impacts positively on competitiveness and profitability (Henderson et al. 1996). Various studies indicate that a comprehensive benefits realization model is required to ensure that organizations maximize benefits of ITSM projects (for example: Gacenga et al. 2010; Tan et al. 2007). However, despite considerable attention to such issues as critical success factor analysis and recommended approaches and the development of a large practice consulting industry, studies have argued that the great majority of these ITSM implementations were not successful and failed to achieve their intended objectives (Cater-Steel et al. 2007; Cater-Steel et al. 2006; Marrone et al. 2011a). Sharifi et al. (2008) find that a primary cause of ITSM failure is an inability to recognize and plan for business benefits.

As organisations continue to invest significant resources to implement ITSM frameworks, benefit realization management (BRM) is increasingly being seen as an approach to realize the strategic business value from ITSM

investments. However, ITSM benefits are difficult to identify, realize and measure (Tan et al. 2007). Whilst the general information systems (IS) literature has looked at the identification of outcomes and benefits arising from ITSM implementations, within the ITSM literature there has been minimal research looking at the quantification of benefits (Marrone & Kolbe, 2010; Iden & Eikebrokk, 2013), no definitive list of ITSM benefits and measurement metrics (Gacenga et al, 2010), and no evaluation of any structured benefit realization framework designed or adapted specifically for the realization of operational and strategic level ITSM benefits. Iden et al's. (2013) systematic literature review of ITSM implementations finds six articles in the IS literature that look at ITSM outcomes and benefits, and another dealing with performance measurement. The focus is on the identification and classification of benefits. Jäntti et al. (2013) find surprisingly few studies investigating the realization of benefits in ITSM projects. None of these studies make reference to a benefit realization approach or framework.

There is however, an established body of literature on benefits realization for Enterprise Systems (ES) and Enterprise Resource Planning (ERP) systems as well as in the General IS literature. This paper is a conceptual study that reviews the literature on BRM and prior learning from the ES and ERP literature and the general IS literature on Benefit Realization Management to adapt and inform the research for the unique characteristics of the ITSM domain. It serves to set the stage for an empirical evaluation of a benefits realisation framework in ITSM practice. In addressing this issue the paper attempts to answer the following question: Given the service imperative of an ITSM implementation, can an extant benefits realization model positively impact on an ITSM implementation?

ITSM differs in its application to Enterprise Systems (ES) in that whereas ERP and Enterprise systems implementations are driven by the implementation of a technical artefact and the concomitant re-shaping of business processes to leverage value from that technical artefact, ITSM implementations require a shift in mindset from a technology focused approach, a supporting role, to one that sees the management of the IT role as a function that generates business value and competitive advantage, a service role. ITSM is seen as a framework for change that impacts on people, processes and organization. Here the focus is on customer service and effective governance, on people and structure. The notion of IT organizational and cultural change dominates the implementation and impacts heavily on potential success. ITSM serves to align the IT function with the business's needs and objectives and in doing so supports and shapes the business strategy (Kashanchi et al. 2006). The ability of managers to realize value from ITSM implementations is dependent on the achievement of this business/IT alignment.

We start by addressing the commonalities between the ERP/ES and the ITSM concepts that justifies our use of the substantial research in the ES/ERP literature on benefits realization to inform and direct our research. We then identify 4 key themes arising from the literature of benefits in the ES implementations and evaluate them for their relevance to ITSM implementations. Whilst there are sufficient similarities between the ERP and ITSM literature (Tan et al. 2009) to justify reviewing the research in the ES/ERP literature on benefits realization, it is important to demarcate where ITSM differs in order to understand both the distinctive character of ITSM implementations and the particular relevance to BRM methodologies. We then identify key differences in ITSM implementations and evaluate their relevance for the identified BRM models. Of the 11 BRM frameworks identified in the academic literature (Eckartz et al. 2012) we look at the 4 most comprehensive for their relevance to the key themes and the unique characteristics of ITSM implementations. We conclude that of the extant BRM models the Cranfield Process Model of Benefits Management and its enhancements (Ward et al. 2007; Ward et al. 1996; Ward et al. 2012b) presents as the most viable option to structure an ITSM implementation.

BENEFIT REALIZATION MANAGEMENT

BRM arose out of concerns with IT/IS project success and extensive research has been conducted on the identification of benefits and the realization of those benefits in IS investments in general (Ward, Taylor et al. 1996; Remenyi and Sherwood-Smith 1998; Thorp 2002; Peppard, Ward et al. 2007; Ashurst, Doherty et al. 2008; Scheepers and Scheepers 2008; Ashurst and Hodges 2010; Ward and Daniel 2012; Ward 2012), and in Enterprise Systems (ES) and Enterprise Resource Planning (ERP) implementations in particular.

Ward, et al.(2007) note that one key distinction between successful and less successful companies is management's capability to evaluate IT/IS investments both prior and post implementation, through the use of a benefits management framework. Eckartz et al. (2012) see benefits management as an approach to identify, plan and manage the delivery of benefits. A business benefit can be described as a measurable outcome whose nature and value are considered advantageous by a stakeholder (Sanchez et al. 2010; Ward et al. 2006). Braun et al. (2009) argue that IT investment benefits can be achieved with the appropriate management. Identifying the operational and organizational benefits of an IT/IS implementation and realizing their business value will thus

impact on the success or failure of the implementation. Following a benefit realization approach to implementing IT/IS processes within an organization can assist the temporal and organizational complexities of an IT/IS implementation.

Tan et al. (2009), in a Critical Success Factor (CSF) study of an ITSM implementation finds sufficient similarities between ERP and ITSM implementations to justify a review of the ERP CSF literature in their study in order to provide insight and direction. They identify the following similarities:

- Both ERP and ITSM implementations are long-lasting and require a major financial investment.
- Both technologies have, as an explicit focus in their implementations, the redesign of process environments. Organisational change management is thus central to the implementations.
- Although ITSM implementations are built on a set of best practice guidelines, both ERP and ITSM implementations involve some form of customisation to satisfy the objectives of the business.

Given the lack of studies looking at the use of benefit realization frameworks in ITSM implementations it is logical to start our evaluation by adapting the criteria used in the literature on benefit realization management in ERP and ES implementations to inform our approach to BRM and ITSM.

REVIEW OF THE ERP/ES BRM MODEL LITERATURE

Reviews in the general IS literature of benefit realization approaches focus primarily on ERP and ES implementations and identify a number of benefit-driven approaches or frameworks that have been developed post the pioneering work of Ward, Taylor and Bond (Ward et al. 1996). A comprehensive review of benefit realization frameworks is provided by Eckartz, Katsma and Maatman, (2012) who detail a classification and comparison table of benefit realization approaches based on a framework developed by Avison and Fitzgerald, (Avison and Fitzgerald 2003) in order to compare methodologies for the purposes of Enterprise System (ES) implementations. An abridged comparison table listing those methods found in the academic literature can be found in the appendices.

A comprehensive benefit realization process would thus oversee an investment from pre-project evaluation to post project evaluation (McKeen et al. 2008). The 11 models from the academic literature for benefits management identified in the Eckartz et al. (2012) review reflect varying priorities in achieving and maximising the identified ERP benefits. The models prioritise aspects of benefit realization management in an effort to guide organisations through a structured process of successfully realizing expected benefits. Some models present as more comprehensive than others. A more comprehensive benefit management and realization process is required to ensure that both process and strategic benefits are realized, that value is extracted and that organizational performance improves (Remenyi et al, 1998). The adoption of a partial benefits realization approach, in for example, a listing of potential benefits (primarily as a prompt for the business case) without the necessary guidance as to how and when these benefits are to be realized will reduce the effectiveness of the approach. The Eckartz framework (2012) evaluates the models based on 4 guiding principles of identification, realization, assessment and quantification. Taking advantage of this and other previous reviews of research into benefit realization management (BRM) (Braun et al. 2009; Eckartz et al. 2012; Lin et al. 2001; Schubert et al. 2009), and utilising these guiding principles we develop 4 key themes (benefit identification, benefit ownership, organisational change and benefits measurement) that we see as crucial to the effective realization of benefits in ITSM implementations.

Key Themes

Benefit Identification

Given the complexity and scale of ITSM implementations and the specific social and economic context within which ITSM is implemented, there can be no standard approach to any such ITSM implementation. The identification of benefits is dependent on the individual project motivation and the specific context and characteristics of the implementation. Whilst some frameworks provide lists of benefits and their classification, the application of a categorized list of benefits to an implementation is difficult in practice. Braun et al (2009) identified only one framework, The Model of Benefits (Changchit et al. 1998) which explicitly detailed the process by which an organisation identified and structured the expected benefits of an ERP implementation. Eckartz et al. (2012) finds very little guidance on the initial identification of benefits and sees this to be a critical issue in their extension of the Cranfield Model.

Within an ITSM implementation the application of a process that sees the identification of benefits integrated with the investment objectives of the implementation, with stakeholders and one that is based on the specific

context of that particular implementation is crucial in any benefit-driven ITSM project. ITSM implementations have long time frames which allow for emergent outcomes that are defined by the context or particular characteristics of the implementation. These emergent outcomes are a result of what Gasser (1986) has referred to as the dynamic interplay between actors, context and technology. The successful realisation of benefits in an ITSM implementation has to take into account that benefits can evolve and change with time. Put differently, the importance of processes to the organisations objectives can vary temporally (Edwards and Peppard 1997). Stakeholders and their perceptions can and will vary as the implementation of the project progresses (Edwards and Peppard 1997; Ward, Hemingway et al. 2005). Further, business change and emergent (unplanned) outcomes hold the potential for change in benefits identification (Shubert et al. 2009). Creating an evolving process for benefits identification that allows for variation in stakeholders and their expectations, business change and emergent outcomes is considered critical for the identification, realization and assessment of ITSM operational and strategic benefits.

The literature does not provide a logical process by which the operational or process level benefits relate or can be related to organizational or strategic level benefits and importantly, how these strategic level benefits would be realized. Whilst a number of studies investigating benefits arising from ITSM process improvements have found operational benefits (Cater-Steel et al. 2006; Jäntti et al. 2013; Marrone et al. 2011a; Marrone et al. 2011b), the success of ITSM implementations cannot be determined solely in terms of cost, but more fully, in terms of organizational effectiveness and strategic value. Marrone and Kolbe (2010), reference Porter (2008), in that exploitation or an increase in benefits at the operational level is necessary but not sufficient for an organisation to achieve a competitive advantage. Best practice can easily be imitated. Rather, an organisation must ensure it attends to both the operational effectiveness and strategic positioning in order to create a sustainable competitive advantage that competitors find difficult to imitate (Barney 1991). This business/IT alignment has been shown to positively impact on organizational performance (Iden et al. 2013; Sabherwal et al. 2001). A large scale survey conducted by Marrone et al (2011b) found that when the ITSM/ITIL maturity increases, strategic benefits such as business-IT alignment also increase. Business-IT alignment leads to other strategic benefits such as an increased competitive advantage as a result of improved decision making and problem solving (Marrone et al, 2011b). Similarly, a case study conducted by Kashanchi et al. (2006) found the use of ITSM/ITIL best practices significantly impacted and supported an organization's business strategy and improved IT strategy. These studies conclude that in ITSM the potential for a strong positive effect on business performance, competitive advantage and profitability is present. In any benefit driven ITSM project the identification of benefits needs to reflect this dual imperative. ITSM benefits need to be linked to the business drivers of the ITSM implementation in order to realise this strategic value.

Benefit Ownership

Given the organization-wide impact of ITSM initiatives it is improbable that the IT department alone can be held accountable for the realization of benefits. Ashurst, Doherty et al. (2008) sees benefit realization as a shared responsibility. Because of the strong focus on efficient business outcomes and organizational change in ITSM projects the primary responsibility for the realization of benefits and thus the success of the implementation should be with those stakeholders who secure an advantage from the benefit. With ITSM implementations the achievement of sustained value from the identified benefits and the organizational change required to realise those benefits is managed by assigning responsibility for the achievement and measurement of benefits to those who will have ultimate responsibility for the new processes. Further, the engagement of the business, as customer and stakeholder not only serves to facilitate the enhancement of the business/IT alignment but also assists with the change of mind-set to a service orientated one, a primary focus of ITSM implementations.

Both Ward et al. (1996) and Remenyi et al. (1998) prioritise the focus on stakeholders and their linkage with the identified benefits. A benefit owner can be defined as a stakeholder or group of stakeholders who gain or secure an advantage from the project benefits (Ward 2012). Given that it is these stakeholders who will have to change roles and work responsibilities in order to realize the anticipated benefits the establishment of a working relationship that secures the relevant stakeholders responsibility in delivering the anticipated benefit increases the probability of benefit delivery. The linkage of stakeholders and benefits is important in that it allows stakeholders to understand the reason why change has to occur and thus identify with the benefit (Remenyi et al, 1998). These stakeholders are the users and managers who are responsible for changing their work practices and roles in order to make the organization more efficient. This, alongside the associated improved relationship between business and IT, movement towards a service provision role and a new role for IT as a provider of solutions to business problems, is seen to considerably improve the success of the ITSM project.

Organisational Change

The implementation of ITSM requires a change from a technology focus to a focus on service. Tan et al. (2007) find organizational change management is essential to transform this focus. A number of studies of ITSM implementations find organizational change management to be a critical success factor in successful ITSM implementations (Iden et al. 2010; McNaughton et al. 2010; Tan et al. 2009; Tan et al. 2007). The realization of benefits from ITSM in the form of the redesign of process environments is essential to the outcome of an ITSM implementation.

Ashurst et al. (2008) identifies a crucial problem with the extant literature on IT/IS assessment practices. Whilst there are a number of studies that identify and list the potential benefits of IS/IT initiatives, to date few studies are explicit in detailing how these benefits are to be delivered. Consistent research has found that IT investments are associated with a high degree of organizational change. Remenyi et al. (1997), Changchit et al. (1998), Doherty et al. (2012) and Ward et al. (2012) all see organizational change processes as the core of the benefits realization approach. Ashurst et al. (2008) and Ward (2012) note that realising potential benefits is difficult to achieve and, as Markus (2004) reports, , this is especially so when the realization of those benefits require organizational change. The complex integration of technology into the business function means any change in the IT function impacts on the roles and responsibilities of workers and the processes, structure and performance of organizations (Markus 2004). The introduction of a new Information System changes the way the organization does its work.

Organizational change management is seen to be a critical success factor in benefits realization. A number of ES studies establish a relationship between a structured benefits realization approach, the manner in which it creates linkages with social and organizational change and improved IT investment outcomes (Farbey et al. 1994; Remenyi et al. 1998; Ward et al. 1999; Ward et al. 1996). Proactively managing the social and organizational changes that result from IT initiatives is seen to be essential in achieving business value (Ashurst et al. 2008). Studies consistently point to the fact that benefits do not simply emerge but rather their realization needs to be carefully planned and managed (Lin et al. 2003; Markus 2004). The conclusion is that successful benefits realisation management is defined by the related organizational change.

Benefit Measurement

Gacenga et al. (2010) find a great deal of difficulty in measuring and reporting benefits in ITSM implementations. They find the challenges to be a result of difficulties in managing stakeholder perceptions, problems in identifying intangible benefits and the length of time between improving processes and measuring the result. However, without being able to measure benefits difficulties must arise in evaluating project outcomes. Coombs et al. (2013) argue that if an organization is intent upon managing benefits they must be able to effectively measure benefits. The implementation of ITSM should produce benefits on both a process and organizational level and these combined results should result in an overall organizational improvement in performance that can be measured. From this perspective, the use of performance measures to measure benefits in ITSM implementations is important because it helps to judge the effectiveness and progress of an ongoing ITSM implementation. Gacenga et al. (2010) see the importance in measuring ITSM benefits in the cost savings and competitive advantage ITSM can bring to an organisation.

Within the general IS literature the primary mechanism utilized to proactively manage the process of benefits realization management is the measurement and monitoring of benefits (Coombes et al, 2013). The appropriate measurement of identified benefits and gauging of progress ensures the desired outcome, enables corrective actions to be taken prior to failure, and facilitates the successful exploitations of benefits (Ward et al. 2012a). Each identified benefit has to be associated with a specific measurement, not only to determine whether or not the benefit has been realized (Remenyi et al. 1998) but equally to be able to communicate that achievement to the business (stakeholders) in a language the business can understand. Equally, the benefits measurement process would require reappraisal throughout the execution and assessment phases of the project (Coombes et al. 2013). Thorpe's (1998) dictum stating 'if you can't measure it, you can't manage it' applies. The four themes identified through a review of the ES literature are seen to have implications for benefit driven approaches in ITSM implementations. Assessing these generic IT themes alongside the unique characteristics and context of ITSM enables us to determine the relevant suitability of the various benefits realization approaches to an ITSM implementation.

UNIQUE CONTEXT AND CHARACTERISTICS OF ITSM

The IT organization is seen to be no longer limited to running the organization as a simple technology provider. A service management approach focussing on continuous improvement that simultaneously satisfies customer

expectations and improves organizational performance is required. Realizing this business value to the organization requires re-orientating the IT organization towards a focus on the quality of the services provided and the customer's satisfaction thereof. ITSM is both customer focussed and process orientated (Wan et al. 2013). Conger et al (2008) define a service as a combination of IT resources that deliver value. This orientation is seen to span organizational and technological boundaries. These services are defined from the user's point of view.

Benefit-driven approaches that seek to structure ITSM implementations must promote the capacity to motivate changes in mind-sets within the IT organization. ITSM changes the work habits and methods of the people involved. It must further be able to identify and measure benefits that place the customer's perception about the quality of the service as the primary driving force for the IT organization. ITSM also is a means of improving the alignment between the business and IT. IT needs to be efficiently managed so it is flexible enough to adapt and develop with business needs and strategy. This alignment is the link between IT and organizational performance (Kashanchi et al. 2006). Not only must IT support business processes it must also facilitate business transformation.

Benefit-driven approaches to ITSM implementations can play an important role to comprehensively address the complexity and breadth of ITSM implementations, define the organizational changes necessary to shift to a service-orientated role and ensure that the implementation is flexible enough to address changes in both content and context.

Assessment: ITSM and Benefit Frameworks

In evaluating the 11 models for benefits realisation only four are deemed appropriate for ES/ ERP implementation (Eckartz et al., 2012). The four comprehensive benefit realization frameworks are assessed in terms of the specific characteristics of ITSM and the four generic themes relevant to ITSM implementations:

- The identification of benefits must reflect both operational and strategic benefits – i.e. both operational improvements and the organisational impact and business value of the investment objectives. Benefit identification and realization must facilitate business/IT alignment.
- The framework must allow for the identification and structuring of benefits over time and provide for a process of identifying benefits relative to the specific context of the implementation.
- The framework must be flexible enough to allow for changes in benefits.
- The framework must assign responsibility for benefit identification and realisation with stakeholders.
- The framework must allow for the measurement of service- orientated benefits so as to measure improvements in service delivery thereby motivating changes in approach.
- The framework must link potential benefits to the business/organisational changes and service mind-set required to realise those benefits.

Table 2: Comparison of the Comprehensive Models in Terms of the Key ITSM Benefit Realisation Themes.

		Guiding principles/ Unique characteristics							
		Identification				Realization			Assessment
		Benefit operation	Strategic & Alignment	Business/ IT	Allow der	Stakeholder	Flexibility	Organisational	
Authors	Method/ Model								Benefit measure ment
Ward, Taylor and Bond, 1996	Cranfield Process Model of Benefits Management		✓	✓	✓	✓	✓	✓	✓
Shang and Sneddon, 2002	Benefit Identification Framework			✓	✓		✓	✓	✓
Remenyi and Sherwood-Smith, 1998	Active Benefit Realization (Process Model)		✓		✓	✓	✓		✓
Ashurst, Doherty and Peppard, 2008	Benefits Realization Capability Model				✓		✓	✓	

THE CRANFIELD BENEFITS MANAGEMENT FRAMEWORK

The impact on people, process, organization and technology and the focus on service and business alignment within ITSM have implications for Benefit Realization Management. Whilst the Cranfield framework is perceived to be complex and there is limited practical guidance on the initial identification of benefits (Eckartz et al. 2012), it remains the most comprehensive benefits realization framework available to manage the realization of identified benefits from ITSM investments. Key elements of the Cranfield Process framework that increase its suitability in ITSM implementations are as follows:

- One of the key features of the Cranfield framework (Ward et al. 2012b) of benefit management is orientating the identification of benefits, not around the delivery of a technical product, but around the business drivers of the project. The framework links the benefits to the investment objectives through a thorough evaluation of the ITSM business drivers. This serves to drive business/IT alignment and the achievement of strategic business value as the ITSM drivers are what is deemed important to the business.
- The Cranfield framework is based on a life-cycle process. That is, the framework presents with a set of linked steps which would guide organizations to identify, scope, justify, plan, implement and review benefit driven ITSM projects so as to maximise business value. ITSM implementations are long-lasting. Critically the framework allows the benefit realization plan to evolve within the lifecycle process. The framework emphasizes the importance of post-implementation benefit reviews. These reviews are designed to explore which of the planned and required benefits have been realized, whether there were any unexpected or emergent benefits arising and which planned benefits are still expected but require additional attention. This process of monitoring and comparing project results with the benefits realisation plan assesses whether the delivery of planned benefits will be affected by any change that has occurred.
- The Cranfield framework is formulated as a set of interrelated tools or frameworks that can be used to guide and structure the activities needed to implement ITSM projects as efficiently and effectively as possible. The framework utilizes the Business Dependency Network (BDN) as the core tool to explicitly link the overall investment objectives and required benefits with the business changes necessary to deliver those benefits. The benefits of ITSM are realized through organisational change as these benefits are based in process change and organisational performance. Key is the structured manner in which the relationships between business objectives, benefits, required business and IT changes and benefit owners can be shown. The BDN created for these purposes allows for detailed and explicit planning that in turn allows stakeholders to understand why the necessary organisational changes must be made. Organisational changes (what people, processes and technology need to be changed) are thus linked to the projected benefits and the investment objectives. This set of tools and frameworks can be used by both business and IT. This serves to ensure both groups can contribute their combined knowledge to IS/IT project, helping to deliver a more effective IS/IT plan which neither group could develop alone.
- By involving stakeholders the approach effectively addresses, engages and links stakeholders with benefits, as benefit owners, to achieve both stakeholder understanding and commitment to the realization of the identified benefits. Within an ITSM implementation the integration of the customer in the benefit realization process enhances business/IT alignment.

The Cranfield benefit management framework is suitable in the sense their approach clearly shows how the intended project will contribute to the organization's business strategy and overall performance. The Cranfield framework was designed to start with an understanding of the drivers and objectives of a particular investment in relation to the organization's overall strategic direction. The strategic direction should then drive the organisation's need for change - in an ITSM context, the need to move to a service orientated culture, and from there, the desirable outcomes of this change - the ITSM benefits which will therefore be tightly linked to the organization's business strategy. The initial identification of benefits is important in terms of achieving initial goals and buy-in from stakeholders. The Cranfield framework provides limited guidance in this but remains the most comprehensive and flexible framework available. Organisations should use the best practices guidelines offered by the ITSM frameworks, such as ITIL, as guidance to identify its own set of benefits and overcome this shortcoming.

CONCLUSION

Doherty et al. (2012) in their study on benefits realisation in the public sector make the very salient point that there are IT/IS projects that are initiated with a benefits focus but fail to deliver business value. The literature on ITSM implementations shows us the unique challenges and difficulties (Gacenga et al. 2010; Tan et al. 2009) in determining and realizing benefits. Orientating detailed planning around contextual benefit identification,

realization and assessment within a service context is required to ensure project success beyond delivery of the technological product. ITSM, in moving from a technological focus to a service focus, requires such detailed planning around business benefits. The tools and techniques of the Cranfield framework should allow IT professionals a greater opportunity to extract business value from their ITSM implementations.

However, we are mindful of Doherty et al's. (2012) observation that no matter the breadth and depth of the literature on IT/IS benefit realization the returns from these projects continue to disappoint, a prime example of the practice – research gap. Whilst it remains to empirically validate the Cranfield framework into effective working practice in an ITSM implementation, such validation should be based on a close collaboration between researchers and practitioners. Mathiassen's (2002) point that, in basing such an empirical validation by these means, a useful balance is struck between relevance and rigour is pertinent. The empirical validation of the Cranfield benefit management framework by such means of as an action research project would serve to reduce the practice – research gap in this field. The purpose is to now evaluate the use of the Cranfield framework for ITSM implementation in a project on the ability of the framework to guide, structure and measure the implementation. The areas of concern to be addressed in such a validation of the Cranfield framework are on the specific processes required in the identification and measurement of benefits in an ITSM implementation.

REFERENCES

- Andresen, J., Baldwin, A., Betts, C., Carter, C., Hamilton, A., Stokes, C., and Thorpe, T. "A framework for measuring IT innovation benefits," *ITCon* (5) 2000, pp 57-72.
- Ashurst, C., Doherty, N. F., and Peppard, J. "Improving the impact of IT development projects: the benefits realization capability model," *European Journal of Information Systems* (17:4) 2008, pp 352-370.
- Barney, J. "Firm resources and sustained competitive advantage," *Journal of management* (17:1) 1991, pp 99-120.
- Braun, J., Ahlemann, F., and Riempp, G. "Benefits Management-A Literature Review and Elements of a Research Agenda," *Wirtschaftsinformatik* (1), 2009, pp. 555-566.
- Cater-Steel, A., Tan, W.-G., and Toleman, M. "Challenge of adopting multiple process improvement frameworks," Proceedings of 14th European conference on information systems (ECIS 2006), European Conference on Information Systems, 2006, pp. 1375-1386.
- Chand, D., Hachey, G., Hunton, J., Owosho, V., and Vasudevan, S. "A balanced scorecard based framework for assessing the strategic impacts of ERP systems," *Computers in industry* (56:6) 2005, pp 558-572.
- Changchit, C., Joshi, K. D., and Lederer, A. L. "Process and reality in information systems benefit analysis," *Information systems journal* (8:2) 1998, pp 145-162.
- Conger, S., Winniford, M., and Erickson-Harris, L. "Service management in operations," 2008.
- Doherty, N. F., Ashurst, C., and Peppard, J. "Factors affecting the successful realisation of benefits from systems development projects: findings from three case studies," *Journal of Information technology* (27:1) 2012, pp 1-16.
- Eckartz, S., Katsma, C., and Maatman, R. O. "A Design proposal for a Benefits Management Method for Enterprise System Implementations," System Science (HICSS), 2012 45th Hawaii International Conference on, IEEE, 2012, pp. 4642-4651.
- Farbey, B., Targett, D., and Land, F. "The great IT benefit hunt," *European Management Journal* (12:3) 1994, pp 270-279.
- Gacenga, F., Cater-Steel, A., and Toleman, M. "An International Analysis of IT Service Management Benefits and Performance Measurement," *Journal of Global Information Technology Management* (13:4) 2010, pp 28-63.
- Gunasekaran, A., Love, P. E., Rahimi, F., and Miele, R. "A model for investment justification in information technology projects," *International Journal of Information Management* (21:5) 2001, pp 349-364.
- Iden, J., and Eikebrokk, T. R. "Implementing IT Service Management: A systematic literature review," *International Journal of Information Management* (33:3) 2013, pp 512-523.
- Jäntti, M., Rout, T., Wen, L., Heikkinen, S., and Cater-Steel, A. "Exploring the Impact of IT Service Management Process Improvement Initiatives: A Case Study Approach," in: *Software Process Improvement and Capability Determination*, Springer, 2013, pp. 176-187.

- Kashanchi, R., and Toland, J. "Can ITIL contribute to IT/business alignment? An initial investigation," *Wirtschaftsinformatik* (48:5) 2006, pp 340-348.
- Lin, C., and Pervan, G. "The practice of IS/IT benefits management in large Australian organizations," *Information & Management* (41:1) 2003, pp 13-24.
- Markus, M. L. "Technochange management: using IT to drive organizational change," *Journal of Information technology* (19:1) 2004, pp 4-20.
- Marrone, M. "Searching for Mechanisms of Knowledge Integration in IT Operational Frameworks: The Case of ITIL," *All Sprouts Content* (10:127) 2010.
- Marrone, M., and Kolbe, L. M. "Impact of IT Service Management Frameworks on the IT Organization: An Empirical Study on Benefits, Challenges, and Processes," *Business and Information Systems Engineering* (3:1) 2011a, pp 5-18.
- Marrone, M., and Kolbe, L. M. "Uncovering ITIL claims: IT executives' perception on benefits and Business-IT alignment," *Information Systems & e-Business Management* (9:3) 2011b, pp 363-380.
- Mathiassen, L. "Collaborative practice research," in: *Organizational and Social Perspectives on Information Technology*, Springer, 2000, pp. 127-148.
- McKeen, J. D., and Smith, H. *IT strategy in action* Prentice Hall Press, 2008.
- Peppard, J., Ward, J., and Daniel, E. "Managing the realization of business benefits from IT investments," *MIS Quarterly Executive* (6:1) 2007, pp 1-11.
- Pollard, C., and Cater-Steel, A. "Justifications, strategies, and critical success factors in successful ITIL implementations in US and Australian companies: an exploratory study," *Information Systems Management* (26:2) 2009, pp 164-175.
- Porter, M. E. *Competitive advantage: Creating and sustaining superior performance* Simon and Schuster, 2008.
- Remenyi, D., and Sherwood-Smith, M. "Business benefits from information systems through an active benefits realisation programme," *International Journal of Project Management* (16:2) 1997, pp 81-98.
- Remenyi, D., and Sherwood-Smith, M. "Business benefits from information systems through an active benefits realisation programme," *International Journal of Project Management* (16:2) 1998, pp 81-98.
- Sabherwal, R., and Chan, Y. E. "Alignment between business and IS strategies: a study of prospectors, analyzers, and defenders," *Information systems research* (12:1) 2001, pp 11-33.
- Sanchez, H., and Robert, B. "Measuring portfolio strategic performance using key performance indicators," *Project Management Journal* (41:5) 2010, pp 64-73.
- Shang, S., and Seddon, P. B. "Assessing and managing the benefits of enterprise systems: the business manager's perspective," *Information systems journal* (12:4) 2002, pp 271-299.
- Tan, W.-G., Cater-Steel, A., and Toleman, M. "Implementing it service management: A case study focussing on critical success factors," *Journal of Computer Information Systems* (50:2) 2009, p 1.
- Tan, W.-G., Cater-Steel, A., Toleman, M., and Seaniger, R. "Implementing centralised IT service management: drawing lessons from the public sector," *Proceedings of the 18th Australasian Conference on Information Systems (ACIS 2007)*, University of Southern Queensland, 2007, pp. 1060-1068.
- Wan, J., and Jones, J. D. "Managing IT service management implementation complexity: from the perspective of the Warfield version of systems science," *Enterprise Information Systems* (7:4) 2013, pp 490-522.
- Ward, J., and Daniel, E. *Benefits management: delivering value from IS and IT investments* John Wiley & Sons, 2006.
- Ward, J., and Daniel, E. *Benefits Management: How to Increase the Business Value of Your IT Projects* Wiley.com, 2012a.
- Ward, J., De Hertogh, S., and Viaene, S. "Managing benefits from IS/IT investments: An empirical investigation into current practice," *System Sciences*, 2007. HICSS 2007. 40th Annual Hawaii International Conference on, IEEE, 2007, pp. 206a-206a.
- Ward, J., and Elvin, R. "A new framework for managing IT-enabled business change," *Information systems journal* (9:3) 1999, pp 197-221.

Ward, J., Murray, P., and Daniel, D. *Benefits management: Best practice guidelines* Cranfield School of Management, Information Systems Research Centre, 1997.

Ward, J., Taylor, P., and Bond, P. "Evaluation and realisation of IS/IT benefits: an empirical study of current practice," *European Journal of Information Systems* (4:4) 1996, pp 214-225.

Ward, J. L., and Daniel, E. *Benefits Management* Wiley, Chichester, 2012b.

Yates, K., Sapountzis, S., Lou, E., and Kagioglou, M. "BeReal: Tools and methods for implementing benefits realisation and management," 2009.

APPENDIX 1

Table 2: Excluded Benefit Management Models (Adapted from Eckartz, Katsma and Maatman, 2012)

Authors	Framework	Overview and reasons excluded
Chand, Hachey, Hunton, Owahso & Vasudevan, 2005	ERP Benefits Framework	Chand et al. (2005) make exclusive use of the balance scorecard (BSC) to measure the performance of ERP systems in the sense that it attempts to ascertain the value of ERP to the organisation from multiple aspects. It effectively combines Kaplan and Norton's (1996) BSC evaluation perspectives with Zuboff's (1985) goals for information systems. Limited in that it does not show how these goals are to be achieved and what metrics are assigned to each question. Designed for ERP systems and prioritises the evaluation of performance.
Gunasekaran, Love, Rahimic & Miele, 2001	The Conceptual Model for Evaluation of IT Projects	Gunasekaran et al. (2001) present a model for investment justification and evaluation in IT projects. They identified key performance areas/measures inclusive of the financial/non-financial and, tangible/non-tangible to guide decision-making on whether or not to invest. The objective is to develop a balanced approach to evaluating investment. IT/IS evaluation criteria are grouped as follows: strategic impact, tactical considerations, organisational performance, financial measures, non-financial indicators and tangible and intangibles. The model was created to guide management with IT investment decisions. The objective is to develop a balanced approach to evaluating investment in projects. Whilst providing for intangible performance measures the model presents with little practical application for identifying and realising benefits.
Andresen et al., 2000	IT Benefits Measurement Process	This benefits evaluation framework has been developed for IT projects in the construction industry. The framework is based on three principles: that strategic alignment and business driven exploitation must be planned for, that the process of realising benefits must be managed and that resulting benefits must be managed.. Benefits are grouped into efficiency, effectiveness and organisational performance benefits. Benefit owners are identified. The model was derived for specific application to IT investment evaluation within the construction sector
Giaglis, Mylonopoulos & Doukidis, 1999	The ISSUE Methodology	Giaglis et al. (1999) advocates a progressive approach to assessing IS benefits which starts with the measurement of operational benefits, or hard benefits and progressing to indirect and intangible benefits and finally, the assessment of strategic benefits. The purpose is to obtain the necessary quantitative and qualitative data needed for investment appraisal. The process is incremental and iterative. It is a staged process with feedback loops to promote learning starting with initiation (linking business goals with expected benefits), through simulation (as-is model), through substantiation, utilisation (to-be model) and estimation, assessing the extent of the improvements of the new system. The model makes no reference to the associated organizational change required.
Changchit, Joshi & Lederer, 1998	The Model of Benefits Identification. (Process Model)	This model (Changchit, Joshi & Lederer, 1998) focuses solely on the identification of benefits and presents a framework for the identification of benefits. The framework consists of four iterative stages consisting of problem identification, mini-study of current business processes, mini-design of proposed business processes and the comparison of the benefits of current and proposed processes. Outcomes of the process are a reduction in uncertainty of benefits, lessened resistance and promotion of user commitment. Focuses solely on the identification of benefits. However, it is the only model that gives practical guidance to the identification of benefits.
Schubert and William, 2009	Extended Benefit Framework	Schubert and Williams (2011) extended benefit framework seeks a more comprehensive classification and categorisation of expected and realised benefits, arguing that benefits are contextually determined from an organisations motivations and intentions and that benefits may change as a result of business change. The benefits classification is described in a five-level framework: The framework seeks to assist organisations to identify and understand the benefits of their ERP systems. Lacks any process to measure or quantify benefits
Yates, Sapountzis, Lou and Kagioglou, 2009	Benefit Realization and Management Framework. (BeReal)	The BeReal framework seeks a common understanding of benefit realization from stakeholders through collaborative environments. It distinguishes four main stages: 1.) Benefits management strategy and benefits realisation case – identifying benefits and strategizing the communication of these benefits. 2.) Benefits profile and benefits mapping. 3.) Benefits realization plan – measuring and tracking identified benefits and 4.) Tracking emerging ones. The BeReal framework was developed for capital investments in the health care industry. Lacks any process to measure or quantify benefits

COPYRIGHT

S. Mcloughlin, H. Scheepers, R. Wijesinghe © 2014. The authors assign to ACIS and educational and non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ACIS to publish this document in full in the Conference Papers and Proceedings. Those documents

may be published on the World Wide Web, CD-ROM, in printed form, and on mirror sites on the World Wide Web. Any other usage is prohibited without the express permission of the authors.